



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/807,232	04/09/2001	Detlef Stoll		3079

29177 7590 06/13/2003
BELL, BOYD & LLOYD, LLC
P. O. BOX 1135
CHICAGO, IL 60690-1135

EXAMINER

ULLAH, AKM E

ART UNIT	PAPER NUMBER
----------	--------------

2874

DATE MAILED: 06/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	09/807,232		STOLL ET AL.	
	Examiner		Art Unit	
		Akm Enayet Ullah	2874	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 12 December 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>3</u> . | 6) <input type="checkbox"/> Other: _____. |

Detailed Action

Applicant cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Status of the Application

Claims 1-19 have been cancelled.

Claims 20-38 are pending in this application

If applicant is aware of any prior art or any other co- pending application not already of record, he/she is reminded of his/her duty under 37 CFR 1.56 to disclose the same.

Drawings

This application has been filed on April 09, 2001 with informal drawings, which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2874

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 20 -38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fleming et al (USPNO. 5,987,200).

Fleming et al a tunable fiber grating comprises a temperature-sensitive body secured to a fiber-grating region for transmitting thermally induced strain to the grating.

The amount of strain and the degree of wavelength tuning are controlled by adjusting the temperature of the temperature -sensitive body, wherein the extent of adjustment is preferably pre-determined according to feedback from a wavelength detector.

Art Unit: 2874

Regarding claims 23 & 24, the filter is designed in planar technology, as a tunable band-stop filter would have been obvious to one having ordinary skill in the art at the time the invention was made to use such filter for producing a drop and continue function in an optical filter, since it has been held that the device allows a wide range of wavelength tuning with a relatively small temperature change near ambient temperature, where needed, involves only routine skill in the art. In re Stevens, 101 USPQ 284 (CCPA 1954).

Regarding claims 30 wherein the branching device and the insertion device is a circulator would have been obvious matter of design choice to use particular material, since applicant has not disclosed its criticality which solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with using such material for coating and etch-resistant coating on chips as claimed.

Regarding claims 33-38 recites that "the device having a plurality of inputs and a plurality of outputs along with at least one optical filter for producing a drop- and- continue function". Fleming et al disclose in column 7, lines 17-20 "The gratings described herein are especially useful in wavelength division multiplexer/demultiplexer devices, including devices with ADD/DROP functionality. Interconnecting optical circulators and fiber gratings can make a wide variety of such devices.

Figure 7 of the reference describes a wavelength division multiplexed communications system comprising a transmitter 100, an improved N-channel multiplexer/demultiplexer 101 and a receiver 102, all connected by a trunk fiber 11. The input on the fiber 11 from the transmitter 100 consists of optical signals at several wavelengths λ_1 to λ_n .

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize such an optical filter device of Fleming et al to produce cross-connect functionality whose frequency and attenuation can be varied since the reference mentioned column 6, last paragraph that many alternative embodiments of the tunable gratings are contemplated and/or a device having a plurality of fibers or grating regions which can be also mounted with different temperature - sensitive bodies.

Cited Prior Art


The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Morey et al, Jin et al., Heidrich et al., Mizrahi et al., Chamberlain et al are also cited to show a typical optical filter device along with a wavelength -selective grating having temperature-dependent reflection and transmission characteristics respectively.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Akm Enayet Ullah whose telephone number is 703-308-4885. The examiner can normally be reached on Mon.- Thurs. 6:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on 703-3084819. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7721 for regular communications and 703-308-7721 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.


Akm Enayet Ullah
Primary Examiner
Art Unit 2874

AUllah
June 10,2003